



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,215	03/24/2004	Christopher Jude Amies	2002P12618US01	3926
7590	03/02/2009		EXAMINER	
Elsa Keller, Legal Administrator Siemens Corporation Intellectual Property Department 170 Wood Avenue South Iselin, NJ 08830				LAMPRECHT, JOEL
		ART UNIT		PAPER NUMBER
		3737		
		MAIL DATE		DELIVERY MODE
		03/02/2009		PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/808,215	AMIES ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	JOEL M. LAMPRECHT	3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 11 December 2008.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-3, 5, 6, 8-13 and 16-34 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-3,5,6,8-13 and 16-34 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>12/11/08</u> .	6) <input type="checkbox"/> Other: _____ .

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/11/08 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 5, 6, 8-13, 16-34 rejected under 35 U.S.C. 103(a) as being unpatentable over Kapatoes et al (6,661,870) in view of Suddarth et al (US 7,011,814 B2). Kapatoes et al disclose the use of both CT and MRI images in the treatment of an area of interest within a patient and the design of therapy plans before, during, and after rounds of radiation therapy are delivered to the patient (Col 2 Line 18-Col 4 Line 30). Specifically they disclose taking a scout image of the area of interest (Col 5 Line 40-57), creating a plan (Col 5 Line 45-62), validating the initial image once a patient is ready for therapy (Col 5 Line 58-Col 6 Line 30), modifying the treatment plan to account for anatomical and positional changes at this point (Col 6 Line 5-50), delivering a dose of therapy and monitoring the dosage and therapy received during the treatment (Col 7 Line 20-50), updating the plan and performing additional treatment as needed based on anatomical and physiological changes of the diseased state of the patient (Col 7 Line 1-30, Col 3 Line 5-45), including the level of radiation received and therefore the stage of treatment at both the tumor site and the surrounding tissues (Col 6 Line 30-50). These physiological and clinical measurements are performed by imaging in an MRI/CT lab and the updating of the plan can include modifications between dosing due to unexpected changes in the tumor site thereby inducing an unscheduled break into the therapy session (Col 2 Line 40-47, Col 3 Line 58-Col 4 Line 17). Updated plans are automatically prescribed and are updated further or verified by the operator or treatment planner (Col 3 Line 5-35, Col 3 Line 58-Col 4 Line 17). The plans include dosage levels, target sites, physiological locations and identifications of tissues of interest which

are all capable of being updated before, between, or for future therapy sessions (Col 5  
Line 34-Col 7 Line 29, Col 6 Line 30-50, Col 3 Line 5-Col 4 Line 30)

Kapatoes et al disclose what is listed above, and also disclose methods for adjusting the prescription of radiation to a tumor or target site, but do not disclose monitoring external factors including stage of disease or treatment, and updating the prescription based on those factors. Attention is directed to the secondary reference to Suddarth et al which discloses a system and method for monitoring physiological factors to indicate the stage of the therapy and physiological state of the patient via metabolic, antibody, bio-response and kinetic measurements of a patient for the updating of treatment protocols (Col 6 Line 20-Col 7 Line 47). These methods and systems of updating therapy prescriptions allow for an updated protocol or treatment based on the biological factors measured. It would have been obvious to one of ordinary skill in the art to have applied the methods of Suddarth et al with the prescription and treatment methods of Kapatoes et al for the purpose of allowing for a broad measure of treatment and assessment methods for analyzing therapies applied to the body.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 5, 6, 17, and 32-34 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOEL M. LAMPRECHT whose telephone number is (571)272-3250. The examiner can normally be reached on 8:30-5:00 Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRIAN CASLER/  
Supervisory Patent Examiner, Art  
Unit 3737

JML